

**Amendments to the Claims:**

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Previously presented) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer having one polymerisable double bond per molecule with from 0.5-100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer, such that the conversion of monomer to polymer is greater than 90% and wherein the weight average molecular weight (Mw) of the branched polymer is in the range of 2,000 to 200,000.
  
2. (Previously presented) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer at least comprising a methacrylate monomer, said monofunctional monomer having one polymerisable double bond per molecule with from 0.5-100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer, such that the conversion of monomer to polymer is greater than 90% and wherein the polyfunctional monomer is at least one monomer selected from the group consisting of ethylene glycol di(meth)acrylate, tripropylene glycol di(meth)acrylate, butanediol di(meth)acrylate, neopentyl glycol di(meth)acrylate, diethylene glycol di(meth)acrylate, triethyleneglycol di(meth)acrylate, dipropylene glycol diethylene glycol di(meth)acrylate, triethylene glycol di(meth)acrylate, dipropylene glycol di(meth)acrylate, allyl (meth) acrylate, divinyl benzene, tripropylene glycol tri(meth)acrylate, trimethylol propane tri(meth)acrylate, pentaerythritol tri(meth)acrylate, pentaerythritol tetra(meth)acrylate and dipentaerythritol hexa(meth)acrylate.

3. (Previously presented) A non-solution method of preparing a soluble branched polymer comprising mixing together a monofunctional monomer having one polymerisable double bond per molecule, with from 0.5-100% w/w, based on the weight of the monofunctional monomer, of a polyfunctional monomer having at least two polymerisable double bonds per molecule and from 0.0001 – 50% w/w, based on the weight of the monofunctional monomer, of a chain transfer agent and optionally a free-radical polymerisation initiator and thereafter reacting said mixture to form said polymer such that the conversion of monomer to polymer is greater than 90%.
4. (Original) The method of claim 1 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
5. (Original) The method of claim 2 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
6. (Original) The method of claim 3 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.
- 7– 9. (Cancelled)
10. (New) The method of claim 1, wherein said reacting of said mixture to form said polymer is performed in one step.
11. (New) The method of claim 2, wherein said reacting of said mixture to form said polymer is performed in one step.
12. (New) The method of claim 3, wherein said reacting of said mixture to form said polymer is performed in one step.
13. (New) The method of claim 10 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.

14. (New) The method of claim 11 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.

15. (New) The method of claim 12 wherein said chain transfer agent comprises a monofunctional thiol or a polyfunctional thiol.